

What is claimed is:

1. A three-dimensionally networked silica composed of silica particles of 0 to 100 nm combining by bridge chains of  $C_1\sim C_6$  alkyl, polyimine, peptide, and polyether groups.
2. A three-dimensionally networked silica according to claim 1, wherein the length of bridge chains is ranged in 0.5 to 100 nm.
3. A three-dimensionally networked silica according to claim 1, wherein the content of bridged chains per silica is ranged in 0.1 to 1.5 mmol/g.
4. (Deleted)
5. A three-dimensionally networked silica according to claim 1, wherein silica particles are combined by reacting silane-coupled silica particles coupled with trialkoxy silane having an amine substituent and another silica particles coupled with trialkoxy silane having a glycidyl substituent.
6. A three-dimensionally networked silica according to claim 5, wherein the reacting pairs are amine and chloride, glycidyl and mercapto, glycidyl and hydroxyl, and amine and mercapto groups.
7. (Deleted)
8. A three-dimensionally networked silica according to claim 5, wherein the silane having an amine substituent is 3-aminopropyltriethoxy silane and the silane having a glycidyl substituent is 3-glycidioxypropyltrimethoxy silane.
9. A three-dimensionally networked silica according to claim 5, wherein the silane having an amine substituent is 3-aminopropyltriethoxy silane and the

silane having a chloride substituent is 3-chloropropyltriethoxy silane.

10. A three-dimensionally networked silica according to claim 5, wherein the silane having a mercapto substituent is 3-mercaptopropyltriethoxy silane and the silane having a chloride substituent is 3-chloropropyltriethoxy silane.
11. A three-dimensionally networked silica according to claim 5, wherein the silane having a mercapto substituent is 3-mercaptopropyltriethoxy silane and the silane having a glycidyl substituent is 3-glycidoxypolytriethoxy silane.
12. A three-dimensionally networked silica according to claim 1, wherein silica particles are combined by reacting silane-coupled silica particles with connecting materials with multifunctional groups on their ends in toluene by refluxing.
13. A three-dimensionally networked silica according to claim 12, wherein the connecting materials are diamines, dichlorides, diisocyanates and dicarboxylic acids with methylene chains of C<sub>6</sub>-C<sub>100</sub>.
14. (Deleted)
15. A three-dimensionally networked silica according to claim 12, wherein connecting materials are diisocyanato having methylene chains of C<sub>6</sub>-C<sub>100</sub>.
16. A three-dimensionally networked silica according to claim 12, wherein the silane having an amine substituent is 3-aminopropyltriethoxy silane and the connecting material is dichloro, dibromo or diiodoalkane with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.
17. A three-dimensionally networked silica according to claim 12, wherein the

silane having an mercapto substituent is 3-mercaptopropyltrimethoxy silane and the connecting material is dichloro, dibromo or diiodoalkane with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.

18. A three-dimensionally networked silica according to claim 12, wherein the silane having a glycidyl substituent is 3-glycidoxypropyltrimethoxy silane and the connecting material is diamino or diisocyanato alkane with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.
19. A three-dimensionally networked silica according to claim 12, wherein the silane having a glycidyl substituent is 3-glycidoxypropyltrimethoxy silane and the connecting material is polyethyleneimine with molecular weight 600-30,000.
20. A three-dimensionally networked silica according to claim 19, wherein the skeletal of connecting materials is polyether of C<sub>6</sub>-C<sub>50</sub>.
21. A three-dimensionally networked silica according to claim 1, wherein silica particles are combined by reacting, silica particles are directly reacting multifunctional connecting materials in toluene by refluxing.
22. A three-dimensionally networked silica according to claim 21, wherein the multifunctional connecting materials are dichlorides with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.
23. A three-dimensionally networked silica according to claim 21, wherein the multifunctional connecting materials are diisocyanates with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.

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